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Doctoral program: Geography

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solid waste processing (recycling)

Doctoral student seminar-2

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As the world's population grows, so does the amount of waste we generate. We generate 2 billion tons of waste every year. which ends up in the landfill. For average, 2 kg per human. Of course, the waste placed in the landfill does not decompose completely and as a result methane is released, of which greenhouse effect is 25 times stronger than that of carbon dioxide and which is one of the causes of global warming. Therefore, as time goes by, European countries are trying harder to see the economic benefits from it and reduce the harmful effects on the environment. For example, Sweden is one of the leaders in the world, which uses almost 100% of waste as fuel and energy. In Sweden, up to 5 tons of waste is produced annually, of which only one percent ends up in landfills, 47% is recycled and 52% is converted into secondary products - converted into energy or used for heating. In Sweden, 20% of the central heating is produced in this way. At the same time, electricity is obtained by processing waste. In Stockholm, about 250,000 households are supplied in this way. Moreover, some countries import from other countries, Sweden averages 800,000 tons per year. In 2014, it even bought 2.3 million tons of waste from Great Britain and Italy. The adoption of solar and wind energy is also increasing in the country, and the Swedish government has set a goal of reducing greenhouse gas emissions to zero by 2045. Secondary material processing enterprises are vitally important, and not only in our country, if the priority should become vitally important, then raising the awareness of the population should be on the agenda.In Georgia, we generate 900,000 tons of waste every year. More than 75% of them end up in landfills. However, according to international obligations, in 2023, all of them should have been closed and 10 new sanitary landfills should have been opened in Georgia. Waste processing should be started actively. Nowadays, there are only a few private companies that recycle waste (as far as I know, some have even closed down). However, we have already committed to recycle 50% of plastic by 2025, and 80% by 2030. Until then, we must learn to use products rationally. This way we save money and take care of the environment.